II. CLAIMS

1. (Currently Amended) ~~Process for manufacturing a~~ A surface formation~~, preferably a sample carrier,~~ with a multitude of MALDI matrix points on a sample carrier, characterised in that the surface formation has a first layer with an ultraphobic surface applied reversibly on a carrier layer where the maximum local flatness deviation of the surface formation on a length of 100 mm is <100 µm and where such surface formulation is prepared ~~MALDI matrix points are applied to the sample carrier~~ by precipitation of a MALDI matrix substance from the gas phase~~, preferably by sublimation~~.

2. (Currently Amended) ~~Process according to~~ A process for manufacturing a surface formation of claim 1, characterised in that a plate covers the sample carrier during the precipitation from the gas phase, which plate has through holes whose cross-sectional area corresponds to the cross-sectional area of the respective MALDI matrix points.

3. (Original) Process according to claim 2, characterised in that the plate has at least one further through hole by means of which information is transferred to the sample carrier by precipitation of the MALDI matrix substance from the gas phase.

4. (Currently Amended) Process according to claim 3, characterised in that the information comprises~~, for example,~~ the composition of the MALDI matrix substance and/or alignment points.

5. (Currently Amended) Process according to claim 2 ~~claim 1~~,

characterised in that the MALDI matrix points are arranged along a grid.

6. (Currently Amended) Process according to claim 2 ~~claim 1~~, characterised in that the MALDI matrix points have substructures.

7. (original) Process according to claim 6, characterised in that the MALDI matrix points are separated into several partial points, preferably isolated from one another.

8. (Currently Amended) Process according to claim 2 ~~claim 1~~, characterised in that different MALDI matrix substances are applied to a sample carrier.

9. (Original) Process according to claim 8, characterised in that at least several MALDI matrix points or partial points each consisting of one MALDI matrix substance are built up.

10. (Currently Amended) Process according to claim 2 ~~claim 1~~, characterised in that α cyano-4-~~hydroxycoumarin~~ hydroxycinnamic acid is used as a MALDI matrix substance.

11. (Currently Amended) Process according to claim 2 ~~claim 1~~, characterised in that the sample carrier has an ultraphobic surface.

12. (original) Process according to claim 11, characterised in that the MALDI matrix points or partial points represent hydrophilic areas which are completely surrounded by ultraphobic

areas.

13-16. Cancelled

17. (Currently Amended) Surface formation according to ~~claim 16~~ claim 1, characterised in that the first layer ~~(2)~~ is glued to the carrier layer ~~(4)~~ .

18. (Currently Amended) Surface formation according to ~~claim 16~~ claim 1, characterised in that there is an electrical contact between the first layer ~~(2)~~ and the carrier layer ~~(4)~~ .

19. (Currently Amended) ~~Long time stable~~ The surface formation ~~with at least one MALDI matrix point,~~ of claim 1 characterised in that it is surrounded by a hollow body containing a vacuum and consisting of material impervious to water vapour and~~,~~ ~~preferably,~~ impervious to light.

20. (Original)Surface formation according to claim 19, characterised in that it has additional biological material on the MALDI matrix point.